

# Kentucky Teacher

May 2000

## New laws cover wide range of education issues

During its 2000 legislative session, the Kentucky General Assembly passed a number of laws that have a direct impact on elementary and secondary public education. On this page and continuing on Pages 6 and 7 is an overview of some of the laws likely to be of greatest interest to teachers.

For a complete summary of all education-related legislation, contact the Department of Education's Office of Legal Services at 500 Mero St., Frankfort, KY 40601; tdrury@kde.state.ky.us; or (502) 564-4474. The summary is also available on the Internet at [www.kde.state.ky.us/legal/](http://www.kde.state.ky.us/legal/). For the complete text of specific bills, go to [www.lrc.state.ky.us/record/00rs/record.htm](http://www.lrc.state.ky.us/record/00rs/record.htm).

### Governance

- HB 884: The Kentucky Board of Education is authorized, at the request of a local school board or school council submitted through the school superintendent, to **waive reporting and paperwork requirements** established by statutes, except reports required by federal law or related to health, safety or civil rights.

- HB 76: An **alternative teaching certification** option for **veterans of the Armed Forces** to teach at elementary, secondary and secondary vocational education levels is established.

- HB 161: The Education Professional Standards Board is authorized to issue two levels of certification for teachers of **exceptional children/communication disorders**, a bachelor's level and master's level. A speech language pathology assistant

may continue to work as a classified employee under the provisions of KRS Chapter 334A or pursue teacher certification.

- HB 623: A teacher who is guilty of a misdemeanor under KRS Chapter 218A (controlled substances) or a violation of the Professional Code of Ethics established by the Education Professional Standards Board is subject to **disciplinary action** by the Education Professional Standards Board.

- HB 623: The Education Professional Standards Board must **suspend a certificate** for a specified period of time not to exceed two years. A suspended certificate is subject to expi-

ration and termination. **Revocation** of a certificate is a permanent forfeiture.

- SB 77: The Education Professional Standards Board is to define **out-of-field teaching** and identify the number of teachers teaching out-of-field.

- SB 91: The State Textbook Commission is to provide a recommended list of **textbooks and instructional materials** with a consumer guide to aid schools with the selection of materials. The commission is to provide for public inspection of textbooks and programs and conduct a public hearing to receive comment on textbooks and programs under consideration.

- SB 280: The Assessment and Accountability Review Subcommittee is to advise and monitor the Office of Education Accountability. The office, under the direction of the subcommittee, is to verify the accuracy of reports of the Department of Education and the Kentucky Board of Education.

- HB 77: The Department of Education, by Dec. 30, 2000, is to establish and implement a comprehensive statewide dropout prevention strategy building upon existing programs and services. The Department is to provide technical assistance and disseminate best practices.

Continued on Page 6



**HAIL TO THE SCHOOL** — President Bill Clinton speaks to the crowd at Audubon Elementary, the first of four stops on his recent School Reform Tour. The president commended the Daviess County school's effective teaching strategies and high expectations for all students. On the stage with Clinton are (left to right) Lt. Gov. Steve Henry, Daviess County Schools Superintendent Stu Silberman, teacher Crystal Davidson, parent Karen Cecil (partially hidden), Audubon Principal Diane Embry, Gov. Paul Patton and U.S. Education Secretary Richard Riley.



# Summer sizzles with opportunities for teachers

**By Kevin Noland**  
**Interim Commissioner of Education**

Like professionals in any field, educators are challenged to update their knowledge and skills on a continuing basis. There was a time when teachers' professional development meant sitting through mandatory, one-size-fits-all lectures that all too often had little relevance to what they as individuals needed to improve instruction in their classrooms.

In Kentucky, those days are fast disappearing. Teachers today need and demand hands-on, learn-by-doing opportunities tailored to their individual knowledge and skill levels and to the needs of the students they teach. The Department of Education now offers a wealth of such opportunities for teacher professional development. The department's Calendar of Events lists dozens of institutes, conferences and workshops. Not on that calendar, but just as important, are the dozens — maybe hundreds — of teacher development opportunities scheduled at the region and district levels, plus the countless informal ways that teachers learn independently and from each other.

Perhaps the brightest star among the many opportunities is the Kentucky Teacher Academies. Launched last summer and expanded this year, the academies mark a new day in professional development for educators. Compare these points with the old "sit and get" in-service days:

- Academies are teacher directed. Before attending a five-day academy during the summer, participating teachers meet as a group. Using the Kentucky Program of Studies and Core Content for Assessment as their foundation, they determine what they need in terms of content knowledge. Design teams tailor five days of training based on those identified needs. Regional service center staff, state university and private college faculty, and master classroom teachers deliver the training in ways that model effective classroom practices, including cooperative groups, inquiry, problem solving, collaboration, reflection, critical thinking and coaching.

- Academies are content-focused. Instructional strategies are addressed,

but the focus is deeper knowledge of subject matter.

- Academies are long-term. Participants make a three-year commitment to form a network of supportive learners. After their five-day summer session, they meet on two separate days during the subsequent school year to talk about how their instruction has improved as a result of their deeper content knowledge. Although scattered throughout the state, they use the Internet to share ideas, swap resources and learn from each other.

- Academies have a strong evaluation component. Teachers provide continuing feedback that drives future academy activities.

This summer's 32 Kentucky Teacher Academies are for middle-grades teachers in mathematics, science, social studies and reading. If the academies live up to their potential — and I think they will — the department will strive to offer them for teachers at other grade levels in the future.

A growing body of research supports the need for teachers to stay con-

nected to current ideas and issues of an academic discipline. Teacher academies connect teachers, give them a sense of belonging, and empower them to take control of their own professional growth and development. This is the future of professional development for teachers. Imagine the profound impact this will have on learning and student success.

*Editor's Notes: Many of this summer's Kentucky Teacher Academies are already filled, but some have waiting lists in case of cancellations. To express interest in participating, phone the Department of Education regional service center serving your district, or notify your district's professional development coordinator.*

*To learn more about Kentucky Teacher Academies, visit the Web at [www.kde.state.ky.us/oapd/ta](http://www.kde.state.ky.us/oapd/ta). Refer questions to Judy Tabor at (502) 564-9850 or [jtabor@kde.state.ky.us](mailto:jtabor@kde.state.ky.us). For access to the Department of Education's Master Calendar, go to the home page ([www.kde.state.ky.us](http://www.kde.state.ky.us)) and click on the calendar icon at the bottom of the page.*

## High school students answer a big question: 'How hard do you try when you take state tests?'

Students at 100 high schools in Kentucky answered extra questions after completing two portions of the Kentucky Core Content Tests in April. Thirty sophomores and 30 juniors in each of those randomly selected schools were part of a 14-question student motivation/accountability survey.

The National Technical Advisory Panel on Assessment and Accountability is conducting the survey. This panel of testing experts advises the state board on testing needs, issues and actions associated with the Commonwealth Accountability Testing System.

Questions on the survey, administered to approximately 6,000 high school students at the completion of the reading and mathematics tests, asked students to rate how interesting the Kentucky Core Content Test was to them and if it covered information they had studied in class. Several questions asked students to rank how hard they worked to make good scores on the tests.

Two questions were directed to students who said they did not try hard on the tests. One of those questions asked them to give reasons why they did not try; the other asked them to recommend one change they would make on the reading or mathematics test.

The national technical panel will include the survey findings in its presentation to the state Board of Education, which is examining student motivation/accountability issues. Later this year, the state board is expected to resume discussion of what, if anything, should be done at the state level to make students accountable for their performance on state tests.



# We thought we didn't have a problem!

## State equity mandate leads to surprise discovery at award-winning middle school

Commentary by Michelle Pedigo  
Barren County Middle School

*Editor's Note: Michelle Pedigo is principal of Barren County Middle School, one of only four schools chosen for recognition as high-performing "schools to watch" by the National Forum to Accelerate Middle-Grades Reform. She is one of two principals who post online diaries about their education experiences and observations. In the following diary entry, Pedigo describes her initial frustration about a state requirement that all schools address equity issues in their consolidated plans. Her thinking: Why would a school in a rural community with a predominantly white, Anglo-Saxon, Protestant population, need an equity program? Pedigo gave Kentucky Teacher permission to print this entry.*

We finalized the state-mandated equity component of our consolidated plan this week. When I first learned that we had this mandate, I cringed. How would we address equity when we had 10 African-American students, three Hispanics and one Japanese student among 550 kids?

I decided to write a \$6,000 grant to the state Department of Education. If we were going to have to learn, I wanted to get paid for it! We received the grant, and we did learn.

First, we learned that in our responsibility to prepare students for a global economy, it is also our responsibility to educate a predominately white, Anglo-Saxon, Protestant school community about other cultures, other races and other religions. Let's face it; we are in the Bible Belt of rural Kentucky. Everybody here is okay with social equity as long as we are just dealing with socioeconomic status. Yes, we can reach out to the lower class and offer money to help them have the same educational and social opportunities, but when we start teaching our students about people outside our own culture, some folks get a little

bristled. We are really talking about changing the culture of rural Kentucky.

There are fears that go along with educating people. First, my father would say, "Are you teaching our white kids to participate in interracial

have a lot less than they do.

The school is expected to break this cultural barrier. It is expected to educate not only our students but society as well. So at Barren County Middle School, we are taking a stab

will purposely choose job-shadowing mentors of different colors and different cultures. We will purposefully bring community people into our school who are not white, Anglo-Saxon and Protestant. We will also better infuse character education, systemically, into our curriculum.

We learned a lot through our equity component, and now I am glad that we were made to write it. Otherwise, people would have still been hearing me say, "We don't have an equity problem. We offer all programming to all students." Now we are working on problems we just determined that we had!

To contact Michelle Pedigo, write to her at Barren County Middle School, 555 Trojan Trail, Glasgow, KY 42141; phone her at (270) 651-4909; or send e-mail to [mpedigo@barren.k12.ky.us](mailto:mpedigo@barren.k12.ky.us).

To read more of her diary entries and those of other educators, visit MiddleWeb, a middle-grades resource sponsored by the Edna McConnell Clark Foundation. The site's address is [www.middleweb.com](http://www.middleweb.com). For direct access to the educators' diary entries, go to [www.middleweb.com/MSDiaries.html](http://www.middleweb.com/MSDiaries.html).

marriages?" or "Are you teaching people to be something other than Protestant?" As we are discussing these issues, we also hear citizens who are adamant about the re-posting of the Ten Commandments in our school. It is a society in which education is okay as long as we keep everyone separated, as long as everyone knows his or her place.

Whew! That's a fine line! Ours is a deep-rooted culture, and although parents would say they want their children to learn about other cultures and appreciate them, one typically would not see different races socializing together. One would find parents still using the word "nigger" at home or offering put-downs for those who

at it. We will purposely choose literature and other learning materials that have other cultures represented. We



Michelle Pedigo

*"When I first learned that we had this mandate, I cringed. How would we address equity when we had 10 African-American students, three Hispanics and one Japanese student among 550 kids?"*

## Talk to us!

Teachers: Kentucky Teacher wants to know what you think, what you need from the Department of Education, what you want to see in future issues.



E-mail [kyteach@kde.state.ky.us](mailto:kyteach@kde.state.ky.us)



Phone (502) 564-3421 or (800) 533-5372  
(toll free in Kentucky)



Fax (502) 564-6470



Write Kentucky Teacher  
1914 Capital Plaza Tower  
500 Mero St.  
Frankfort, KY 40601

# KVHS technology tools help teachers give and get the best

By **Faun S. Fishback**  
Kentucky Department of Education

Real-time students in a virtual high school — sounds like the setting for a movie about the future! Yet that's just what's happened this spring in Pike County and Pikeville (Independent) high schools. Thanks to a pilot project offered by the Kentucky Virtual High School (KVHS), three teachers and 100 high school students in these Eastern Kentucky school districts are using the Internet to teach and learn Spanish, history and art.

KVHS, just one semester old, is a statewide educational service that delivers a variety of high school courses and online learning opportunities to Kentucky students. Teachers also use the same tools in their classroom instruction. Like the "cyber teachers" for the online school, the Pike County and Pikeville teachers have access to KVHS's tool kit. The tools allow them to communicate with students, post assignments and reference materials, monitor students' work and test their skills — all on the Internet. Students, and their parents, access the information from school or home.

All three teachers emphasize that they use the tools to enhance their instruction, not replace it. "Nothing can replace a warm, caring body in the classroom," said Ernie Johnson, Pikeville High history teacher/technology coordinator. "But when we're competing with Nintendo games at home, these tools offer something that help get students involved in the classroom."

Teachers can post questions in an online discussion center or threaded discussion for students to think about and respond to. Some students seem to prefer using the keyboard to express ideas rather than speaking out in class.

"I might get one or two students answering questions in class, but in a threaded discussion I get responses from all my students. There seems to be less fear of speaking out online," Johnson said.

Pikeville High art teacher Paula Smith is excited about how the tools

help her create a unit of study. For her studio art class, she was able to find Internet sites on sculptor Henry Moore and post the links in her online assignment sheets. Students clicked on the links and then used the information to create their own sculpture in the studio. She also set up a private discussion area for students to exchange ideas.

"The KVHS tools allow me to co-

amples of artists' work. "There is so much we can do with the arts using these tools," she added.

Belfry High Spanish teacher Stephanie Shepherd likes the fact that she is able to use the tools to tailor an online class to fit her students' needs and her own needs. She calls the KVHS tools an "organizational dream." Students can ask and answer questions by e-mail; she has fewer papers to

these tools is the ability to do things that I am unable to do in my regular class," Shepherd said. "Students can access listening exercises on the site and listen as many times as they need to for comprehension. They also can practice their pronunciation without pressure." She said she is looking forward to the day when her students send her audio clips of their pronunciation exercises.

"My students are excited about learning, and I feel rejuvenated by allowing my creativity to set my limits," Shepherd added.

"This is so new, we really don't know the potential we have," said Smith. "I think the possibilities are boundless!"

"It's exciting and scary," added Johnson. "I think we're just scratching the surface of what this new instructional tool can do for student learning."

To see how teachers and students use the KVHS tools in an online course, go to [www.kvhs.org](http://www.kvhs.org) and click on Demonstration Course. Kentucky teachers also can get free use of the tool kit in their classrooms for six months at [www.kvhs.org](http://www.kvhs.org).

For more information about the Kentucky Virtual High School, contact Linda Pittenger at (800) 884-1754, Ext. 219, or by e-mail at [lpitteng@kde.state.ky.us](mailto:lpitteng@kde.state.ky.us). Ernie Johnson and Paula Smith can be reached at (606) 432-0185 or by e-mail at [ejohnson@pikeville.k12.ky.us](mailto:ejohnson@pikeville.k12.ky.us) and [psmith@pikeville.k12.ky.us](mailto:psmith@pikeville.k12.ky.us). Contact Stephanie Shepherd at (606) 353-7230 or by e-mail at [sshepherd@pike.k12.ky.us](mailto:sshepherd@pike.k12.ky.us). All four can be found on the KETS global list.



Photo by Rick McComb

**Art teacher Paula Smith and history teacher Ernie Johnson share ideas as they access Kentucky Virtual High School tools to prepare online Internet assignments for their students at Pikeville (Independent) High School.**

ordinate information about artists and their work in a short amount of time," Smith said. "This enhances my unit of study by providing students with a strong combination of information and inspiration." She also is excited about being able to "take" her students to museums around the world to see ex-

carry home. The Exam Manager tool lets her set up an exam and provide feedback for each question on the test. The tool will grade the test for her and post the scores in an online gradebook that is accessible to students and their parents.

"The most exciting part of using

Watch for information about how teachers can use KVHS as a professional development tool in next school year's *Kentucky Teacher*.





By Tom Lewis  
Ashland Daily Independent

*Editor's Note: This story and photo, published in the Ashland Daily Independent on March 12, are reprinted with permission. Kentucky Teacher edited to make the story fit this page and updated some facts to reflect the West Carter team's victory in the final game of the Kentucky Girls' High School Basketball Tournament on March 25.*

Like it or not, young people look at athletes as role models.

Right or wrong, athletics are often more glorified in society than academics.

Rather than moan and groan, two Upper Tygart Elementary teachers decided to use those realities to their advantage. To borrow a sports phrase, it appears they have scored big.

Upper Tygart is about 15 minutes from West Carter High School, the home of one of Kentucky's top girls basketball programs. Upper Tygart teacher Connie Hillman's daughter, Meghan, is a sophomore on the West Carter Lady Comets basketball team. Hillman said her primary students were always asking questions about the team.

She and fellow teacher Leigh Williams decided that such interest in the Lady Comets could be used to motivate their primary students academically, and what started as a pen pal program has blossomed into a year-long unit that touches on several school subjects.

• **Reading** — The Daily Independent and Olive Hill Times are supplying the elementary school with copies of newspapers that include articles about the Lady Comets. The students use the newspapers to gain information, increase comprehension skills,

analyze words and learn how to use a newspaper. Each Lady Comet visited Upper Tygart to read to students from a book that was special to her during her own childhood.

• **Writing** — Each Lady Comet was a pen pal to four or five of the primary students, and they wrote letters back and forth two or three times. Students created dictionaries of basketball terms, interviewed their pen pals and wrote player profiles, and wrote persuasive letters to their parents about why they should get to go to a Lady Comets game. Those letters will be included in the pupils' writing portfolios.

• **Mathematics** — The students calculated the travel mileage and statistics for the Lady Comets, studied the dimensions of a basketball court and analyzed the ways points can be scored. They learned calendar skills from the Lady Comets' schedule. A group of Upper Tygart students were

learning to multiply by the number 3 when they happened to attend a game at which Lady Comet senior Mandy Sterling hit seven three-pointers.

• **Social studies** — Upper Tygart students learned mapping skills by finding and marking the counties where the Lady Comets have played this year and by tracing the routes from Olive Hill to the sites of district, regional and state tournaments. They also created a timeline tracing the history of the Lady Comets program.

• **Health and physical education** — The Lady Comets led the Upper Tygart students in some basic basketball drills, and those drills may be incorporated into the school's physical education classes.

• **Science** — The students have done experiments on the velocity and "bounce" of a ball rolled or thrown against various surfaces.

But one of the best things about the involvement of the Lady Comets

and the elementary students, Hillman said, goes beyond textbook knowledge. It is the lessons the players conveyed about teamwork, perseverance and believing in themselves — lessons that are particularly important to students who come from troubled home environments or who have no older siblings.

"Positive lessons like that have just been great. I don't think the kids will ever forget that," Hillman said.

"I think it's absolutely wonderful," said Von Perry, West Carter assistant girls' basketball coach. "It's kind of a big brothers/big sisters program."

Perry said the Lady Comets have learned a great deal about responsibility and setting a good example through their dealings with the Upper Tygart students. Several players said they did not realize until this project the kind of pedestal young children put them on.

"It's exciting to know these kids look up to you, but there's also a little pressure," said Kandi Brown, West Carter's candidate for Kentucky's Miss Basketball. "You have to watch what you do and what you say."



Photo by John Flavel, Ashland Daily Independent

West Carter Lady Comets basketball player Jenise James reads to primary students at Upper Tygart Elementary School in Carter County. A partnership between the athletes and the younger students started as a pen pal program and became a year-long theme for teaching and learning in several core content areas.

For information about linking primary instruction with local high school sports, call Connie Hillman or Leigh Williams at (606) 286-2110 or send e-mail to them through the KETS global list or to [chillman@carter.k12.ky.us](mailto:chillman@carter.k12.ky.us) or [lwilliams@carter.k12.ky.us](mailto:lwilliams@carter.k12.ky.us). For information about benefits at the high school level, phone Von Perry at (606) 286-2481 or send e-mail to her through the global list or to [vperry@carter.k12.ky.us](mailto:vperry@carter.k12.ky.us).

## New Laws

Continued from Page 1

### Local Boards and School Districts



- HB 136: Each local board of education is to develop and adopt a policy requiring a state **criminal records check on all volunteers** who have contact with students on a regularly scheduled or continuing basis or who have supervisory responsibility for children at a school site or on school-sponsored trips.
- HB 266: Each local school board is to develop a policy regarding the possession and use of a **personal telecommunications device** by a student while on school property or while attending a school-sponsored or school-related activity on or off school property.
- HB 347: Schools must be closed on the third Monday of January in observance of the birthday of **Martin Luther King, Jr.**
- SJR 57: Any version of the **Ten Commandments** may be used in a historical display.

### School Councils



- SB 76, SB 265: A **parent representative** on the school-based decision making council may be an employee or a relative of an employee as long as the employee or the relative is not an employee of the school or working in the district's administrative offices.
- SB 76, SB 265: A **teacher** who is not a resident of Kentucky may serve on the school council.
- SB 76, SB 265: Each school council is to adopt a policy concerning council consultation in the **selection of personnel** by the principal.
- SB 76: School councils adopting

a **term of office** other than one year are no longer limited to nonconsecutive two-year terms.

- SB 76, SB 77: First-time school council members are to complete their training no later than 30 days and experienced members 120 days after the beginning of the service year for which they are elected to serve.
- SB 77: A teacher elected to a school council is not to be **involuntarily transferred**.
- SB 265: Each school council is to review **student performance** data provided by the Kentucky Department of Education by Dec. 31 each year and adopt a plan to ensure that each student makes progress toward meeting the capacities and goals for education.
- HB 324: Each school is to establish and maintain a **school library media center** staffed by a certified school media librarian. The school council is required to consult with the **school media librarian** on matters pertaining to the facility, including purchase of instructional materials, information technology and equipment.

### School Employees



- HB 519, HB 739: The Kentucky Board of Education is to promulgate administrative regulations to implement the **hiring of retired educators in critical shortage areas**.
- HB 161: A teacher of **exceptional children/communication disorders** is to receive teacher salary and retirement benefits and given credit for experience as a speech-language pathology assistant.
- HB 640: Local districts are to provide the same salary rate adjustment for employees of **family resource and youth services centers** as provided for other local board of education employees in the same classification.
- HB 126: Brother, sister, daughter-in-law and son-in-law are added to the definition of "immediate fam-

ily" for the purposes of granting **sick leave** or providing sick leave donations to a teacher or employee.

- HB 373: A district may include classified employees in the **sick leave** bank program. District employees may donate sick leave to employees who suffer catastrophic loss to real or personal property due to a natural disaster or fire that is likely to result in 10 days absence.
- HB 258: Annual retirement service credit is to be awarded to **classified employees** of school boards on the same basis as for teachers for service on or after July 1, 2000.
- SB 143: A hearing officer is granted final authority to rule on **teacher tribunal** dispositive prehearing motions. The right to appeal to a tribunal exists only for a public reprimand, suspension without pay and termination.

### Curriculum, Instruction, Assessment and Accountability



- HB 157: The state board is to incorporate strategies for **character education** in the state curriculum framework. Character education programs and activities are considered components of the actual schoolwork constituting a school day.
- HB 178: The **Kentucky Early Mathematics Testing Program** is established as a voluntary Web-based program of diagnostic testing to inform private and public high school students of their level of knowledge relative to postsecondary standards.
- SB 280: The Office of Education Accountability under the direction of the Assessment and Accountability Review Subcommittee is to verify and validate the **state assessment program** through external indicators of academic progress.
- HB 77: School rewards will be given to schools exceeding the improvement goal and having an annual **dropout rate** of less than 5 percent effective July 1, 2006.

### Professional Development



- HB 25: The Education Professional Standards Board is to promulgate administrative regulations to implement the **Teachers' National Certification Trust Fund** for providing stipends for teachers to prepare for certification by the National Board for Professional Teaching Standards, to reimburse local boards for substitutes for certification candidates, and to provide stipends for board-certified teachers to serve as mentors.
- HB 254: The Kentucky Geographic Education Board is established to provide leadership and planning for **geography** education for the population of Kentucky.
- SB 77, HB 668: All administrators, including the school finance officer, are required to complete 42 hours of instructional leadership training every two years.
- SB 240: Teachers and employees in state and locally operated secondary area technology centers may earn up to six college credits per term in **tuition-free courses** at public postsecondary institutions.
- SB 77: Supervising teachers and resource teachers are eligible for **tuition-free classes**.
- SB 77: The Department of Education is to establish an **electronic bulletin board** with information about professional development opportunities.
- SB 77: The **Professional Development Growth Fund** is established to provide high-quality professional development to improve teachers' content knowledge in core disciplines. The funds will be used to support middle school teachers from 2000 to 2004 and middle school mathematics teachers for the next two years with the Department of Education to determine areas of focus in subsequent years.
- SB 77: The **Center for Middle School Academic Achievement** is established to foster collaboration, provide assistance to teachers and dis-



Continued from Page 6

tricts, establish networks of communication among teachers, develop a clearinghouse of information on middle school teaching and conduct research.

- SB 77: A classroom teacher or administrator may be provided additional compensation for serving as a **classroom mentor, teaching partner or professional development leader** in core discipline areas and other subject areas as appropriate to other education professionals in a state-approved program or state approved activities. The Kentucky Department of Education is to administer the funds appropriated for these purposes.

- SB 77: The Department of Education is required to establish teacher academies in the core disciplines.



## Finance

- HB 689: The Auditor of Public Accounts is responsible for an annual audit of the funds in each **school district cooperative**, school district consortium, school district corporation and any other entity formed by school districts under KRS 65.210 to 65.300. The Auditor of Public Accounts serves as chair of the State Committee for School District Audits.

## Studies and Reports

- SCR 88: The Interim Joint Committee on Education, through a subcommittee, will study **teacher compensation and benefits** to make recommendations so that salaries and benefits equal the national average by 2004.

- HCR 114: The Interim Joint Committee on Education will conduct a study of **salaries of classified employees** in public schools and submit a report to the Legislative Research Commission by Aug. 31, 2001.

- HCR 88: The Education, Assessment and Accountability Review Subcommittee is to study the issues of adequate preparation of students for **promotion** to higher grades, the establishment of appropriate criteria for entrance into higher grades and **remediation rates** of entering postsecondary students.

- HCR 82: The Interim Joint Committee on Education will study the issue of the instruction of the principles of **economics** and the need for promoting economic education during the 2000-2002 legislative interim.

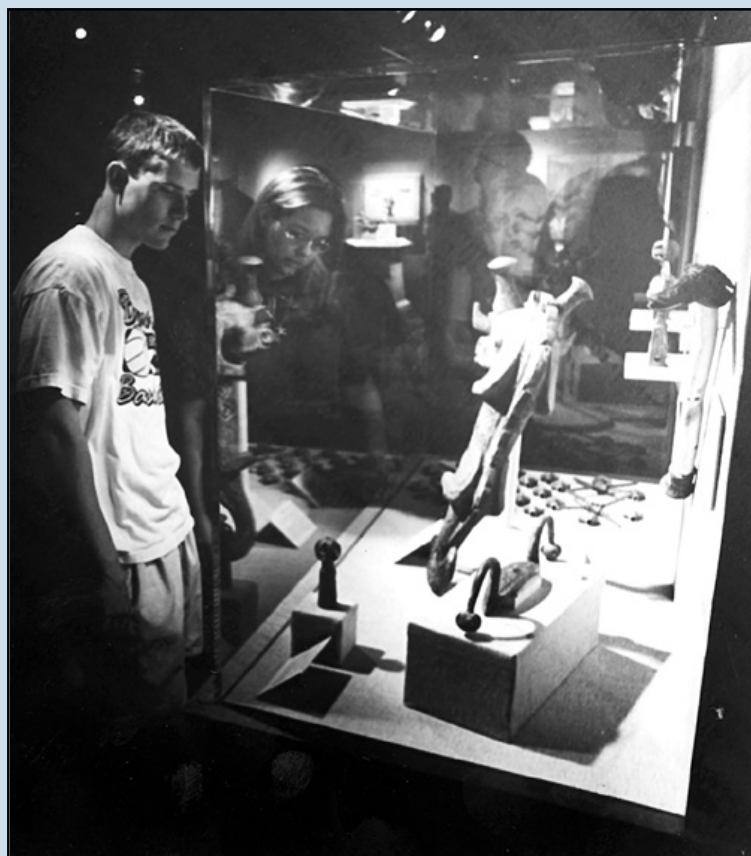


Photo by Rick McComb

**IMPERIAL EXPERIENCE** — Students from Deming School in Robertson County view artifacts on display in "Imperial China: The Art of the Horse in Chinese History," an exhibition at the Kentucky Horse Park in Lexington. More than 7,000 Kentucky students visited the exhibition in the two weeks following its opening on May 1. The event features more than 350 artifacts, including items representing the Western Zhou Dynasty (1027-771 B.C.) through the Qing (1644-1911). The exhibition runs through Aug. 31, and openings are available for group tours. Call Pat Woodall at (859) 259-4232 to make reservations for school or other youth groups or to inquire about grant money available to help defray transportation costs for schools. To order a teacher's guide (\$3 plus \$2 shipping), phone Barbara Dietrich at (859) 259-4206.

## State Fair to feature 20<sup>th</sup>-century exhibition for students and teachers

Students and teachers will soon have new opportunities to study life throughout the 1900s. This year's Kentucky State Fair, Aug. 17-27 in Louisville, will feature an educational exhibit, "Life in Our Times: A Decade-by-Decade Look Back at the 20<sup>th</sup> Century." Through a time line, a hall of fame, interpretive sets and other features, the exhibition will review events of the past 100 years and celebrate American culture and Kentucky history.

The Courier-Journal invites students in primary through grade 12 to

enter works of art and writing related to the exhibition theme. A Web site ([www.kyfairexpo.org/statefair/index.html](http://www.kyfairexpo.org/statefair/index.html)) provides entry guidelines and content suggestions. Some student works from all grade levels may be included in the exhibition; others may be included in exhibition-related materials or on the Web site. All essays and small artworks must be received by July 31. For guidance on submitting a large work such as scale models, quilts and oversize paintings or sculptures, send e-mail with a description of the work to Stephanie Darst at

[sdarst@home.com](mailto:sdarst@home.com).

The Web site provides a wealth of ideas teachers and students may use to develop individual and group writings and artworks that address the theme. Educators whose schools have been involved in projects that fit the "Life in Our Times" theme have opportunities to present those projects at the fair. Lesson plans for thematic projects may be considered for inclusion in a "Life in Our Times" curriculum. Contact Darst for details. School groups are welcome at a discounted per-person admission cost.

Exhibition staff and volunteers will be on hand to facilitate student participation. Grade-specific printed outlines for self-guided tours and multidisciplinary curriculum materials are available in advance to teachers booking tours. To request a booking form, call (502) 367-5201.

For details, visit the Web site ([www.kyfairexpo.org/statefair/index.html](http://www.kyfairexpo.org/statefair/index.html)), send e-mail to Stephanie Darst ([sdarst@home.com](mailto:sdarst@home.com)), or write to Darst at Kentucky Fair and Exposition Center, PO Box 37130, Louisville, KY 40233-7130.

# Algebra and Geometry

## Collaboration is key to teaching higher-level mathematics

By Faun S. Fishback  
Kentucky Department of Education

What do mirrors, hula-hoops, origami and blocks have to do with learning geometry?

More than many teachers might think, says Jo Price, a primary teacher at New Castle Elementary in Henry County. Students may better understand lines of symmetry when they see it in a mirror. They can better visualize circumference while holding



Jo Price

a hula-hoop. Folding paper into halves and fourths can teach fractions as well as create three-dimensional origami designs that lead to discussions of volume. Students can learn about area and perimeter using blocks and other geometric shapes.

"Students with special needs learn better when they feel, see and touch," said Price, who has been a special education teacher for many of her 22 years in the classroom. Teachers need to find those activities that will help reinforce their students' learning.

Price was quite at home among tables displaying blocks, paint, hoops, books and games during a recent Geometry for All workshop. The two-day event was one of several sponsored this spring by Frankfort- and region-based consultants for the Kentucky Department of Education. The mathematics and special education consultants facilitated higher-skills mathematics workshops in both the fall and spring for nearly 2,100 elementary, middle and high school teachers.

Each training session emphasized the necessity of collaboration between mathematics and special education teachers to improve student learning. At each level, teachers modeled age-

appropriate lessons that would allow their students to discover, apply and connect higher mathematics skills to real-world situations. The lessons offered hands-on — often group-oriented — inquiry-based approaches that help all students understand the higher mathematics concepts.

Geometric and algebraic concepts are part of "Kentucky's Core Content

dents are expected to answer questions concerning these mathematics concepts on the Kentucky Core Content Tests.

Mathematics teachers need to collaborate with special education teachers to design mathematics course work that delivers the same rigorous content to special needs students as is taught to other students taking the



Mathematics teacher Julie Markus and special education teacher Barb McGill, both from John W. Reiley Elementary, create a three-dimensional shape using toothpicks and marshmallows. Such activities help students understand higher-level mathematics, said Markus. They were participating in a Geometry for All workshop to learn inquiry-based approaches that help all students understand higher mathematics concepts.

Photo by Rick McComb

for Assessment" for all primary, elementary, middle and high school students. Beginning with the Class of 2002, all Kentucky high school graduates must have one credit in Algebra I, one in geometry and one in another mathematics elective to meet minimum graduation requirements. All stu-

same courses. That most often requires multiple teaching strategies that address a variety of learning styles, said Tricia Bronger, a special education consultant for the Department of Education. Bronger has taught algebra as part of a collaborative algebra model at South Oldham High School.

Not everyone realizes there are ways to teach these learning concepts beginning in primary classrooms that build a foundation of knowledge to help students be successful in high school courses, Price said. She looks for activities, games and fun ways to help her primary students understand complex mathematics concepts.

"This year, I had my students plant a butterfly garden at school," she said. "They had to determine the shape of the garden and the depth to place the plants. They had to determine the size of plantings so the tall ones didn't block sun from the shorter plants. That's all mathematics!"

Julie Markus, a mathematics teacher for advanced primary and 4<sup>th</sup> grade at John W. Reiley Elementary in Campbell County, echoed the need for student activities. "Coming up with good ideas is a big problem," Markus said. At the workshop she made three-dimensional shapes using marshmallows and toothpicks. "Students can see the vertices, represented by marshmallows, on the toothpicks," she said. "They can touch it and feel it and really understand. The concept is no longer just a word. The students now have something they can relate it to."

"Because people learn in different ways, we need different types of activities to reach students' different ability levels and ages," added Barb McGill, a Reiley special education teacher.

A key element to all students' success in higher-skills mathematics is the pairing of a special education teacher and a mathematics teacher to design and deliver the content. Collaborating teachers need first to analyze student work to discover what mathematical processes a student can do, what they need to learn and how they learn, said Bronger, the department consultant. By understanding where the student stumbles in completing an assignment, teachers can determine how to



# Geometry for All

## Mathematics to students with special needs

deliver the content for that student. Then they can decide what accommodations, modifications and extensions will help the student overcome barriers to learning.

### Extensions for Learning

The Department of Education recommends extensions to instruction and assessment that teachers can use to help students be successful. Teachers may need to use only one extension or a combination of several extensions to help students achieve at their highest level. Here are a few examples:

- Relate mathematics activities to real-world situations, like the butterfly garden Price had students create.
- Use a variety of tasks and assessments. For example, teachers can “think aloud” to give students a window into how they reason out the problem.
- Create more than one format. If using origami, prefold the paper or place dotted lines to accommodate special needs students.
- Provide additional time to complete the assignment without penalty.
- Adjust course length and time intervals within units of study.
- Be actively involved in instruction and adapt the learning environment to the students’ learning styles.
- Review prerequisite concepts before giving new information.
- Set goals and guidelines for what students should achieve.
- Use manipulatives and models. A word wall keeps students interacting with visual references of information.
- Have students communicate mathematical ideas. Understanding can be assessed informally as the teacher walks around the room talking with individual students.
- Allow students to solve problems independently, with a partner or in groups. Include problems that don’t

have an obvious problem-solving strategy or procedure to help students develop higher-order thinking skills in the context of mathematics.

- Provide a variety of tasks and activities; give students opportunities to select how they will participate and how they will demonstrate what they know.
- Give frequent feedback to students to help motivate their learning.

### Using Technology

Technology can be useful in addressing key points as well as for solving problems. With the right software, students can manage numbers, create dimensional objects or manipulate measurements to make multiple representations of their work. Teachers also can have students get data from

the Internet to use in equations or building geometric figures.

“Technology really helps teachers accommodate students,” said Carolyn Hornbeck, mathematics consultant for Region 4. “Sometimes it’s as simple as making a box bigger for a student’s answer or bolding words or increasing the type size. A teacher who has lessons on the computer can customize the sheets for each student.”

Two mathematics WebQuests are posted on the Department of Education’s Web site at [www.kde.state.ky.us/oapd/curric/math\\_training\\_folder/middlemath.asp](http://www.kde.state.ky.us/oapd/curric/math_training_folder/middlemath.asp) and [www.kde.state.ky.us/oapd/curric/math\\_training\\_folder/intmath.asp](http://www.kde.state.ky.us/oapd/curric/math_training_folder/intmath.asp). The WebQuests are accessible to all teachers.

For more information about summer and fall Mathematics for All professional development programs, contact Sheila Vice, mathematics consultant, at (502) 564-2106 or by e-mail at [svice@kde.state.ky.us](mailto:svice@kde.state.ky.us) or Tricia Bronger, exceptional children consultant, at (502) 564-2672 or by e-mail at [lbronger@kde.state.ky.us](mailto:lbronger@kde.state.ky.us). Contact Jo Price, New Castle Elementary, at (502) 845-2775 or by e-mail at [jprice@henry.k12.ky.us](mailto:jprice@henry.k12.ky.us). Julie Marcus and Barb McGill, Reilly Elementary, can be reached at (859) 635-2118 or by e-mail at [jmarkus@campbell.k12.ky.us](mailto:jmarkus@campbell.k12.ky.us) and [bmcgill@campbell.k12.ky.us](mailto:bmcgill@campbell.k12.ky.us).

E-mail to any of these educators also may be sent through the KETS global list.

### Have questions? Need help?

Answers and assistance are available from these consultants who participated in Algebra for All and Geometry for All training:

- Bill Kunnecke, [ckunneck@kde.state.ky.us](mailto:ckunneck@kde.state.ky.us), Region 1, mathematics  
Monica Feiler, [mfeiler@kde.state.ky.us](mailto:mfeiler@kde.state.ky.us), Region 1, primary  
Sheila Holloway, [shollowa@kde.state.ky.us](mailto:shollowa@kde.state.ky.us), Region 1, exceptional children  
Janice Eaves, [jeaves@kde.state.ky.us](mailto:jeaves@kde.state.ky.us), Region 2, mathematics  
Pete Hoechner, [phoechne@kde.state.ky.us](mailto:phoechne@kde.state.ky.us), Region 2, exceptional children  
Jane Jones, [jjones4@jefferson.k12.ky.us](mailto:jjones4@jefferson.k12.ky.us), Region 3, mathematics  
Carolyn Hornbeck, [chornbec@kde.state.ky.us](mailto:chornbec@kde.state.ky.us), Region 4, mathematics  
Margaret Reed, [mreed@kde.state.ky.us](mailto:mreed@kde.state.ky.us), Region 4, exceptional children  
Jerry Barrowman, [jbarrowm@kde.state.ky.us](mailto:jbarrowm@kde.state.ky.us), Region 5, mathematics  
Rina Gratz, [rgratz@kde.state.ky.us](mailto:rgratz@kde.state.ky.us), Region 5, primary  
Donna Farmer, [dfarmer@kde.state.ky.us](mailto:dfarmer@kde.state.ky.us), Region 6, mathematics  
Kathy Dykes, [kdykes@kde.state.ky.us](mailto:kdykes@kde.state.ky.us), Region 6, exceptional children  
Vonda Stamm, [vstamm@kde.state.ky.us](mailto:vstamm@kde.state.ky.us), Region 7, mathematics  
David Hamblin, [dhamblin@kde.state.ky.us](mailto:dhamblin@kde.state.ky.us), Region 7, exceptional children  
Linda Hall, [lhall@kde.state.ky.us](mailto:lhall@kde.state.ky.us), Region 8, mathematics  
Lora Cheek, [lcheek@kde.state.ky.us](mailto:lcheek@kde.state.ky.us), Region 8, primary  
Ann Bartosh, [abartosh@kde.state.ky.us](mailto:abartosh@kde.state.ky.us), Frankfort, mathematics  
Denise Bailey, [dbailey@kde.state.ky.us](mailto:dbailey@kde.state.ky.us), Frankfort, exceptional children

For information about regional summer Geometry for All workshops for high school teachers sponsored by the Appalachian Educational Laboratory, see Page 13.

# ‘Technological literacy’ may not mean what you think it does

By Sharon Crouch Farmer  
Kentucky Department of Education

To most people, the term “technological literacy” means having the knowledge and skills to use computers. That definition, however, has quickly expanded to include not only computers but also an understanding of the applications, methods and materials that drive all types of technology at home and at work.

There is a difference between the teaching of technology (technology education) and using technology to teach (education technology). To address the former, the International Technology Education Association (ITEA) has released multidisciplinary content standards for students in K-12 to provide a framework for incorporating the study of technology education across the curriculum. These new technology education standards are separate from those that address the use of technology to enhance learning.

“The ITEA standards are more aligned with national K-12 standards in mathematics and science,” said Rodney Kelly, director of the Kentucky Department of Education’s Division of Secondary Vocational Education. “Our technologies have become so interrelated that a new development in any area can have far-reaching effects. We need to understand those relationships in order to meet future demands.”

Kentucky’s Department of Education is one of seven states collaborat-

ing as the Center to Advance the Teaching of Technology and Science (CATTS). For the past two years, CATTS has been building curriculum around the new standards as they were drafted. “Train the trainer” sessions were held for middle school technology education teachers in the summer of 1999. This summer, high school technology education teachers and university technology education faculty will be trained. “These standards and the curriculum will become the basis for improving our technology education programs,” Kelly said.

Special sessions are scheduled during this year’s Kentucky vocational-technical conference in July. In the summer of 2001, the department will offer statewide professional development opportunities on technology education curriculum for all technology education teachers.

For more information or the text of ITEA’s *Standards for Technological Literacy: Content for the Study of Technology*, plus sample activities, curriculum integration suggestions and student benchmarks for learning at each grade level, go to [www.itea.org/TAA/TAA.html](http://www.itea.org/TAA/TAA.html) on the Internet. To purchase print copies, contact ITEA at 1914 Association Dr., Ste. 201, Reston, VA 20191-1539; phone (703) 860-2100; fax (703) 860-0353; e-mail [itea@iris.org](mailto:itea@iris.org).



Photo by Rick McComb



Photo by Linda Jones, Wayne County Schools

**AWARD-WINNING TEACHER** — Edwin Stamper, assisting Wayne County High students Olivia Webb and Josh Campbell, is Kentucky’s 1999 Applied Technology Teacher of the Year.

## Summary Listing of Standards

### Technological Literacy: Content for the Study of Technology

#### The Nature of Technology

- Standard 1:** Students will develop an understanding of the characteristics and scope of technology.  
**Standard 2:** Students will develop an understanding of the core concepts of technology.  
**Standard 3:** Students will develop an understanding of the relationships among technologies and the connections between technology and other fields of study.

#### Technology and Society

- Standard 4:** Students will develop an understanding of the cultural, social, economic and political effects of technology.  
**Standard 5:** Students will develop an understanding of the effects of technology on the environment.  
**Standard 6:** Students will develop an understanding of the role of society in the development and use of technology.  
**Standard 7:** Students will develop an understanding of the influence of technology on history.

#### Design

- Standard 8:** Students will develop an understanding of the attributes of design.  
**Standard 9:** Students will develop an understanding of engineering design.  
**Standard 10:** Students will develop an understanding of the role of troubleshooting, research and development, invention and innovation, and experimentation in problem solving.

#### Abilities of a Technological World

- Standard 11:** Students will develop abilities to apply the design process.  
**Standard 12:** Students will develop abilities to use and maintain technological products and systems.  
**Standard 13:** Students will develop abilities to assess the impact of products and systems.

#### The Designed World

- Standard 14:** Students will develop an understanding of and be able to select and use medical technologies.  
**Standard 15:** Students will develop an understanding of and be able to select and use agricultural and related biotechnologies.  
**Standard 16:** Students will develop an understanding of and be able to select and use energy and power technologies.  
**Standard 17:** Students will develop an understanding of and be able to select and use information and communication technologies.  
**Standard 18:** Students will develop an understanding of and be able to select and use transportation technologies.  
**Standard 19:** Students will develop an understanding of and be able to select and use manufacturing technologies.  
**Standard 20:** Students will develop an understanding of and be able to select and use construction technologies.



# The secret: Plan, monitor, evaluate

## Kentucky's alternate portfolio system sets national standard

By Sharon Crouch Farmer  
Kentucky Department of Education

In recent testimony before the U.S. Congress, the American Association of University Affiliated Programs put Kentucky's alternate portfolio assessment system in the national spotlight. The association praised Kentucky's program as the nation's first fully inclusive, statewide educational assessment and accountability system for students with moderate to severe disabilities. It called Kentucky's alternate portfolios "the national prototype" for meeting requirements of the 1997 amendments to the Individuals with Disabilities Education Act.

One of the educators who implements Kentucky's alternate portfolio system believes success stems from the simplicity of the system's foundations. "Kentucky's alternate portfolios follow a very simple, basic premise: plan, monitor and evaluate," said Mark Hurte, Lincoln County Middle School special education teacher.

That's what Hurte does. He begins each year working with parents, students and core content teachers to develop individual programming for each student. "A rich portfolio uses everyone who can support the learning of the students," Hurte said. He supports the premise that a good alternate portfolio drives good instruction that is based on best practices.

Hurte's eight students spend about 65 percent of their time in regular classrooms assisted by him or one of two assistants. Teacher Kathy Lane says her other students are willing peer tutors. She modifies the work expected of her special-needs students, but the content remains the same.

Hurte uses the state Program of Studies and the publication "Teaching ALL Students in Kentucky Classrooms" to modify curriculum. The latter, developed in 1997 through the Kentucky Statewide Systems Change Project at the University of Kentucky, provides strategies for including students with disabilities in regular classrooms. Teams of regular teachers al-

ternate each year so that no teacher has special-needs students two years in a row. The goals and objectives outlined in the individual education program for each incoming 7th-grade student become part of the alternate portfolio process.

Hurte labels an accordion folder for each student in the alternate assessment system. Sections inside the folder correspond to portfolio entry require-

Throughout the academic year, teachers monitor student progress in the classroom while parents stay involved through correspondence with the school and by helping with homework. Students have a role in tracking their own progress. "We train them to use worksheets as a guide to plan, monitor and evaluate their own work," said Hurte. "This makes each learner an active participant, helping to sat-

the curriculum. Special-needs students and peer partners pair up for a combination of hands-on activities and class work.

"Studying the areas of ecology and mathematics, we went to a local nursery to price and buy landscaping materials and produced an outdoor garden design with the help of the landscape architect," said Hurte. That one activity met the following alternate portfolio requirements:

- Arts and humanities — analysis of forms and visual arts
- Language arts — accessing information
- Mathematics — classifying, quantifying and measuring
- Vocational — career path and employability attributes
- Science — systems, models and scales
- Social science — relationships and historical perspectives
- Health and physical education — consumerism and mental/emotional wellness

Hurte believes that some of the best learning, however, occurs in a natural environment. "Our students spend part of their day working around the school — in the copy room, lunch room or office, for example," he said.

Hurte says the involvement of teachers from inception through implementation is critical to the program's success. He also credits the state's proactive approach to meeting federal requirements related to alternate assessment.

For more information about Lincoln Middle School's alternate portfolio strategies, contact Hurte at (606) 365-8400 or [mhurt@lincoln.k12.ky.us](mailto:mhurt@lincoln.k12.ky.us).

For information about Kentucky's alternate portfolio system, visit [www.ihdi.uky.edu/projects/kap](http://www.ihdi.uky.edu/projects/kap) on the Internet or contact Mike Burdge, state coordinator of alternate assessment, at (859) 257-4170 or [mburdge@ihdi.uky.edu](mailto:mburdge@ihdi.uky.edu).



Special education teacher Mark Hurte (left) helps Chris Blanton modify a science activity for his portfolio while Kathy Lane (second from right) takes another path to learning identical content with Brittany Burnside.

Photo by Rick McComb

ments. Work samples are filed as portfolio evidence throughout the year and are available for review by student or teacher at any time.

August, December and February are benchmark months, when Hurte meets with each student, parents and core content teacher to review the data collected in the folder. In March and April, students revise and edit the required entries.

isfy the monitoring process called for in the individual education program."

Hurte cautions teachers to remember that these students are *always* on alternate assessment. "A valid alternate portfolio will illustrate data that reflects student achievement across time, settings and contexts," he said.

Lincoln Middle integrates community-based instruction activities into



## A Decade of Difference at McLean County Middle

**Some schools launched education reform from a tradition of excellence. McLean County Middle built from scratch to be one of the top-scoring middle schools in the state.**

**By Jim Parks**  
Kentucky Department of Education

*Editor's Note: April 11, 2000, was the 10<sup>th</sup> anniversary of the signing of the Kentucky Education Reform Act. To mark the occasion, the Kentucky Department of Education published a comprehensive report, "Results Matter: A Decade of Difference in Kentucky's Public Schools." McLean County Middle is one of 12 schools profiled in that report. These 12 schools are examples of successes happening in many schools — and inspiration for schools still looking for the keys to future success.*

When a visitor arrives at McLean County Middle School on a weekday morning, Principal Julie Clark is teaching a class, filling in for a flu-stricken teacher.

Later, she is in the parking lot coaxing a frequently truant student into

school. The student's mother has driven her to school, but the girl is refusing to get out of the car. Clark's coaxing succeeds.

Later, Clark excuses herself briefly to move a doormat that is holding one of the school's front doors slightly ajar.

In between, Clark and teachers at the school describe how they developed McLean County Middle, a school in a county with one stoplight, into one of the top-performing middle schools in the state.

A lot of teamwork, attention to students and a drive for perfection — right down to straightening that doormat — have a lot to do with it. While some schools launched education reform from a tradition of excellence, the people at McLean County Middle built from scratch. Before 1995, the district had no middle school. Its elementary schools served students through grade 8. When the district built its first middle school, it recog-

nized an opportunity to create an institution and lay the foundation for a tradition of excellence. It was an opportunity, Clark said, "to get things right from the beginning."

Now in its fifth year, the building — "home" every school day for 400 early adolescents — shows no signs of wear. There's a reason for that. The administration and faculty, reasoning that it would be a long time before rural McLean County could afford another new building, emphasized respect for the gleaming new facility. They got it.

As a new faculty, the teachers also dug into the state's Core Content for Assessment to build a solid academic program. "We're very focused on core content," Clark said. "We have that down to an art form." They divvied up responsibility for teaching all the concepts. They structured their program so key concepts introduced in earlier grades are developed and reinforced during the years students will be tested on them.

Teachers have also focused professional development on content, "training that is really germane to what they're teaching," Clark said. They've also integrated the teaching of mathematics into science and vice versa. They use open-response questions routinely, and students write in every class.

The arts and practical living portions of core content are covered in electives and integrated into other classes. Different aspects of dance, for example, are covered in physical education, art and English classes. These areas of core content are also enhanced through two new labs, one with piano keyboards connected to computers, the other full of state-of-the-art technology and materials that connect mathematics and science learning with real-world experiences and careers.

The changes — the intense focus on core content — didn't come easily for some teachers.

"I was rebellious," laughed Sheila Iglehart, a 26-year veteran educator. Changing meant that she had to stop teaching things in social studies that were fun for her but really not very important for students to know, she said.

McLean Middle's focus has made it one of the top dozen middle schools in the state and one of the few rural schools among the state's top scoring middle schools. The school is located just outside Calhoun, the county seat, which really does have the county's only stoplight. McLean is farm country. Flat, fenceless and seemingly endless fields of soybeans and corn lie along arrow-straight roads. Clusters of grain bins are the most prominent structures in the landscape. Corporate chicken farming is expanding rapidly.

Few students come from high-income families, and few are extremely poor, although about 40 percent qualify for free and reduced-price meals. Many parents work outside the county, in Owensboro or Madisonville.

"The main difference here," said science teacher Shannon Lindsey, "is the high expectations we have for students. Apprentice is not acceptable."



Students use electronic keyboards in Debbie Howard's music class at McLean County Middle, one of the top-scoring middle schools in the state. For Amy Baughn (top of page), science vocabulary was one assignment of the day.

Photo by Rick McComb

The print edition of "Results Matter: A Decade of Difference in Kentucky's Public Schools" is available free of charge from the Department of Education Bookstore. The supply is limited. To request a copy, phone Windy Newton at (502) 564-3421; send e-mail to [wnewton@kde.state.ky.us](mailto:wnewton@kde.state.ky.us); or write to the Department of Education Bookstore, 19<sup>th</sup> Floor, Capital Plaza Tower, 500 Mero St., Frankfort, KY 40601. The report is also available free of charge on the Internet. Go to [www.kde.state.ky.us](http://www.kde.state.ky.us).



Apply now to present  
at KTLC 2001

The Kentucky Department of Education invites proposals from educators interested in making presentations at the next Kentucky Teaching and Learning Conference, scheduled for March 8-10, 2001, at the Kentucky International Convention Center in Louisville. The deadline for workshop and session proposals is Aug. 31, 2000.

Conference coordinator Charlotte Chowning of the Department of Education's Office of Education Technology seeks presenters with expertise in a broad range of topics and skills.

"We want educators from all content areas to share units, lessons and instructional activities with proof of success in helping students learn and reach proficiency in state assessment programs," she said. "This includes strategies for guiding students from novice through apprentice and proficient to distinguished. We have many teachers doing great work, and everyone can learn from these classroom leaders."

Chowning also seeks presentations on proven approaches that address the many issues facing schools today: school safety, after-school programs, creative instructional uses of intersessions in alternate calendars, equity and diversity issues, systemic professional development programs improving teachers' abilities to teach, analyzing student work, middle school initiatives, dropout reduction strategies, preparing students for the world of work, and meeting standards for both teachers and students.

For more information about the conference and the process for submitting applications to present, visit the conference's Web site at [www.kde.state.ky.us/kytlc](http://www.kde.state.ky.us/kytlc), or contact Charlotte Chowning at [cchowning@kde.state.ky.us](mailto:cchowning@kde.state.ky.us) or (502) 564-7168.

2000 Christa McAuliffe  
applications due June 9

Experienced Kentucky teachers have until June 9 to apply for the 2000 Christa McAuliffe Fellowship program. Applicants are asked to develop plans that demonstrate how they would assist the Kentucky Department of Education's Office of Academic and Professional Development in designing and implementing high-quality Kentucky Teacher Academies. The academies will be focused on enhancing the content knowledge of participating middle-level teachers.

One fellowship is awarded in each state on a competitive basis in honor of the late Sharon Christa McAuliffe, the teacher who served as an astronaut on the Challenger space shuttle in 1986.

In Kentucky, the winner will receive approximately \$30,000 for research, support and/or salary reimbursement. The Department of Education will supplement the fellowship so the fellow may take sabbatical leave to work in the department during the spring 2001 semester and continue working through the summer.

The department has sent fellowship information all Kentucky school superintendents to distribute to teachers. Completed applications must be postmarked by June 9.

To learn more about the Kentucky program, contact Judy Tabor at (502) 564-9850 or by e-mail at [jtabor@kde.state.ky.us](mailto:jtabor@kde.state.ky.us) or through the KETS global list. Information about the national Christa McAuliffe program is available on the Internet at [www.ccsso.org/mcauliffe\\_desc.html](http://www.ccsso.org/mcauliffe_desc.html).

AEL to sponsor institutes  
on geometry for all

The Eisenhower Consortium at the Appalachia Educational Laboratory will sponsor three-day regional summer institutes open to all high school teachers of mathematics. Each institute is designed to increase content knowledge, encourage hands-on teaching methods and provide strategies for meeting the diverse needs of all students.

Registration fees vary from region to region, with the maximum being \$25. Details are available from regional team leaders. (Note: Region 3 is not participating).

- Region 1 (July 17-19): Teri Lampkins, [scottwl@vci.net](mailto:scottwl@vci.net)
- Region 2 (June 28-30): Janice Eaves, [jeaves@kde.state.ky.us](mailto:jeaves@kde.state.ky.us)
- Region 4 (August 2-4): Gina Foletta, [foletta@nku.edu](mailto:foletta@nku.edu)
- Region 5 (July 25-27): Jim Moore, [jmoore@danville.k12.ky.us](mailto:jmoore@danville.k12.ky.us)
- Region 6 (July 24-26): Kim Zeidler, [kzeidle@pop.uky.edu](mailto:kzeidle@pop.uky.edu)
- Region 7 (July 11-13): Robert Boram, [r.boram@morehead-st.edu](mailto:r.boram@morehead-st.edu)
- Region 8 (July 12-14): Joyce Watson, [jwatson@floyd.k12.ky.us](mailto:jwatson@floyd.k12.ky.us)

'Faces of Reform' tours state

A photographic exhibit celebrating the 10th anniversary of the passage of the Kentucky Education Reform Act will continue touring the state throughout the spring, summer and early fall.

"Faces of Reform: 1990-2000" features a brief narrative plus photographs taken during the past decade by Department of Education photographer Rick McComb. The department unveiled the exhibit on April 11 at the 10th anniversary celebration in Frankfort.

For additional information about the exhibit, contact JoAnna Crim at (502) 564-3421 or [jcrim@kde.state.ky.us](mailto:jcrim@kde.state.ky.us).

Exhibit Schedule

- May 2 - May 22: Barren River State Resort Park
- May 22 - June 2: Dale Hollow State Park
- June 2 - June 16: Lake Cumberland State Resort Park
- June 19 - June 30: Murray State University
- June 30 - July 14: Kentucky Dam Village State Resort Park
- July 17 - July 28: Eastern Kentucky University Library
- July 31 - Aug. 16: Gheens Professional Development Academy, Louisville
- Aug. 17 - Aug. 27: Kentucky State Fair, Louisville
- Sept. 4 - Sept. 14: University of Kentucky Library
- Sept. 15: Academic Showcase, Lexington
- Sept. 18 - Sept. 29: Kenton County Public Library
- Oct. 2 - Oct. 13: Natural Bridge State Resort Park
- Oct. 16 - Oct. 27: Jenny Wiley State Resort Park

# Environmental Education Opportunities

## Council to award \$500 grants

The Kentucky Environmental Education Council will award \$500 grants to 30 teachers who develop projects that use the local environment to teach across the curriculum. The grants, to be awarded this summer, must be spent during the 2000-2001 school year.

The program is open to all educators, including those at public and private schools, as well as home school associations. Non-formal educators may apply as well.

The grants may be used for equipment or materials, outdoor classrooms or local trips directly related to class instruction. The money cannot be used for professional development.

In their applications, educators must describe their projects, estimate the number of students involved and state how they would spend the funds.

Applications are available from the Environmental Education Council. Call toll free (800) 882-5271 or send e-mail to Jane Wilson Eller, executive director, at [jane.eller@mail.state.ky.us](mailto:jane.eller@mail.state.ky.us). The deadline for applications is June 15. Grant recipients will be notified in June, and funds will be awarded in August.

## Middle school teachers invited to ecology institute

Kentucky middle school teachers can increase their content knowledge in environmental science and ecology during a summer institute at Western Kentucky University. Teachers also will receive materials on how to use local ecosystems to improve hands-on instruction.

The ecology institute is sponsored by the Kentucky Environmental Education Council and the university July 10-14 in Bowling Green. Participants will meet twice during the 2000-2001 school year to discuss how they are using the knowledge gained during the summer institute. They also will have access to a Web site for exchanging information during the school year.

Teachers attending the institute will receive a \$500 stipend and either room and board or mileage expenses. Graduate credit is available.

For more information or to register for the institute, contact Jane Wilson Eller or Jo Carol Roberts at the Kentucky Environmental Education Council toll free at (800) 882-5271. The institute is funded through an Eisenhower grant with support from the council.

## Internet Tools for Teachers

### • U.S. Patent and Trademark Kids Pages

[www.uspto.gov/go/kids](http://www.uspto.gov/go/kids)

This colorful site invites students to learn about inventors and intellectual property — patents, trademarks, copyrights and trade secrets. Students can read frequently asked questions and answers, take a patent trivia quiz, read facts and learn how to apply for a patent for their own inventions.

### • Pathways to School Improvement

[www.ncrel.org/](http://www.ncrel.org/)

From this home page of the North Central Regional Educational Laboratory, click on “Pathways to School Improvement” for access to a gold mine of ideas for people wanting to take stock of their school, work to improve it and then measure their success. Also from this home page, link to many other valuable resources.

### • Travel the World With National Geographic

[www.nationalgeographic.com/education](http://www.nationalgeographic.com/education)

Take your students on an exciting “Online Adventure”! Select from more than 100 journeys — everything from a trek through the Congo to a trip through the Virtual Solar System. Visit the “Maps & Charts” section for more than 600 printable maps. Stop by “Xpedition Hall” and click to move from one museum exhibit to the next. This site presents detailed K-12 lesson plans for subject areas ranging from world history to life science to geography. Search for educational material by subject, grade level or resource type.

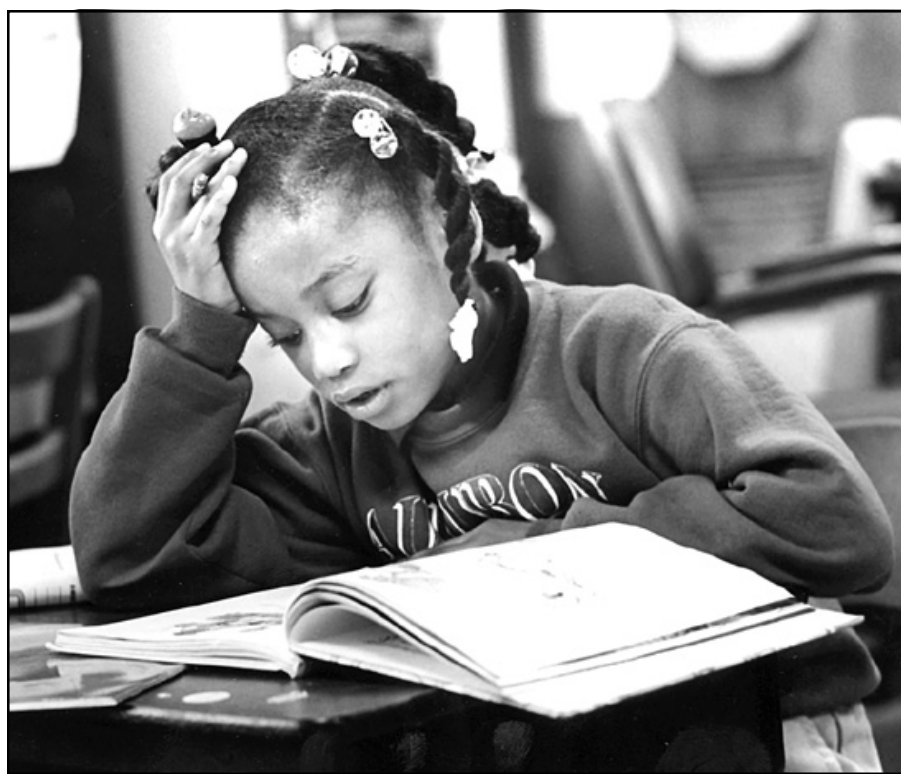


Photo by Rick McComb

**READING TIME** — Tynesha Bussey catches up on her reading at Audubon Traditional Elementary in Jefferson County. The school was one of the top scorers in three of the seven areas of the Kentucky Core Content Tests administered in the spring of 1999.



# THE Bulletin Board

By Lisa Y. Gross  
Kentucky Department of Education

## 'Refresher course' scheduled for library media specialists

The Kentucky School Media Association and the Kentucky Department of Education will sponsor a one-day "refresher course" for school library media specialists. The event will be from 9 a.m. to 4 p.m. EDT on July 18 at Jeffersontown High School in Louisville.

The keynote speaker will be Peggy Sharp, renowned children's literature and library programming expert. The agenda includes sessions on online databases, the Kentucky Commonwealth Virtual Library, Kentucky Virtual High School, successful grant application strategies, best practices, library automation software and more.

The event is open to all Kentucky school library media specialists, and six hours of professional development credit will be available. The fee of \$10 per participant includes lunch; participants are responsible for their own travel and lodging. Registration closes June 16.

Online registration and session information are posted on the LMS Academic Village at [www.pld.fayette.k12.ky.us/lms/default.htm](http://www.pld.fayette.k12.ky.us/lms/default.htm).

CONTACT: Diane Culbertson, [dculbert@kde.state.ky.us](mailto:dculbert@kde.state.ky.us), (502) 564-7168

## Historical Society invites teachers to three summer workshops

The Kentucky Historical Society invites elementary and middle school teachers to three interdisciplinary workshops at the Kentucky History Center:

- July 20 and 21 — The Kentucky Historical Society and the Kentucky Archaeological Survey offer "Project Archaeology" based on a national training program that immerses participants in the skills, processes and issues of archaeology.

- July 26 — The Kentucky Folklife Program hosts a six-hour "Folklife, Fieldwork and Photography" Polaroid workshop featuring the interviewing and photography skills needed to document and interpret local folk traditions. Participants take home a camera to use in local projects.

- Aug. 1 — The Kentucky Historical Society and the Kentucky Department of Fish and Wildlife focus on art and science activities in a six-hour "Activating Audubon" event at the History Center and Salato Wildlife Center.

Workshop fees cover lunch and materials. Pre-registration is required.

CONTACT: Vicky Middleswarth, (502) 564-1792, ext. 4425

## Free workshop presents Bluegrass music as a teaching tool

The International Bluegrass Music Association invites elementary classroom and music teachers to a workshop, "Teaching Core Content With Bluegrass Music," from 8:30 a.m. to 5:30 p.m. EDT on June 10 in Lexington. The morning session will be at Georgetown College; the afternoon session will take place at the Festival of the Bluegrass at the Kentucky Horse Park.

Each registered participant will receive sample lesson plans, handouts and resource lists plus a complimentary ticket to the day's Festival of the Bluegrass activities. Those who complete the eight-hour course will receive certificates for professional development credit. The event is free for teachers, but there is an \$8 materials fee for those who build two-string banjos. Class size is limited to 50. For agenda details, visit the Web at [www.ibma.org](http://www.ibma.org).

CONTACT: Nancy Cardwell, (888) 438-4262, (270) 684-9025, [nancyc@ibma.org](mailto:nancyc@ibma.org)

## 'Gateway' finds the best on the 'Net

A new tool helps teachers pinpoint the Internet resources that are likely to be the most effective learning tools for their students. At the Gateway to Educational Materials ([www.thegateway.org](http://www.thegateway.org)), teachers may enter a topic, grade level and other information into a search screen. The search retrieves grade-appropriate lessons, instructional units and other materials from a collection of 7,000 instructional materials available from federal, state, university, nonprofit and commercial organizations.

The ERIC Clearinghouse on Information and Technology spearheads the site with support from the U.S. Department of Education.

## KCSVO annual conference set for Louisville

The Kentucky Coalition of School Volunteer Organizations will host its annual conference on Nov. 10 at the Holiday Inn South in Louisville. Session topics will include parent involvement, establishing a volunteer program, confidentiality and the laws, safety planning and more.

The keynote speaker will be Bonnie Freeman, director of Special Projects/Training for the National Center for Family Literacy. The registration fee is \$75 per person. Professional development credit is available.

CONTACT: Nancy C. Rogers, (270) 692-1300; [www.kcsvo.com](http://www.kcsvo.com)

## 'Ben's Guide' demystifies government

An online resource, "Ben's Guide to the U.S. Government for Kids," helps students learn about the branches of the federal government, the election process and how laws are made. The site includes debate topics, word puzzles, historical documents and resources for parents and teachers.

See "Ben's Guide" at <http://bensguide.gpo.gov/>.

# Kentucky Teacher

## INSIDE THIS ISSUE:

New laws cover range of education issues.....	1
Summer sizzles with opportunities.....	2
How hard do students try on state tests?.....	2
Equity mandate leads to surprise discovery.....	3
KVHS helps teachers give and get the best.....	4
Learning is a ball at Upper Tygart Elementary.....	5
Collaboration is key to higher math for students with special needs.....	8-9
Meaning of “tech literacy” expands.....	10
Alternate portfolios set national standard .....	11
A Decade of Difference: McLean County Middle builds from scratch.....	12
News and opportunities.....	13-14

Interim Commissioner of Education. . . . . Kevin Noland

Associate Commissioner . . . . . Hunt Helm  
for Communications

Director . . . . . Armando Arrastia  
Division of Public Information

Editor . . . . . Fran Salyers

Copy Writers . . . . . Sharon Crouch Farmer  
Faun S. Fishback  
Lisa York Gross

Photographer . . . . . Rick McComb

Graphics and Design . . . . . Susie Morrow, Manager  
Barbara Burch  
Bill Davis  
Michael Gray

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# Kentucky Teacher

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**DOTTING I's, CROSSING T's—** Teacher Mandee Bowling helps Lindsey Howard improve her cursive writing at Millard Hensley Elementary in Magoffin County.

*“We learned that in our responsibility to prepare students for a global economy, it is also our responsibility to educate a predominately white, Anglo-Saxon, Protestant school community about other cultures, other races and other religions.”*

Michelle Pedigo, principal of award-winning Barren County Middle School, on discoveries made in implementing a state equity requirement. See her commentary on Page 3.

**Kentucky Department of Education**

Visit the Kentucky Department of Education's Web site: [www.kde.state.ky.us](http://www.kde.state.ky.us)